

PATENT SPECIFICATION

720,943



Date of Application and filing Complete Specification April 30, 1953.

No. 11963/53.

Application made in Austria on Nov. 3, 1952.

Complete Specification Published Dec. 29, 1954.

Index at acceptance:—Class 31(2), C1A2, C3(C: D3), C6H2.

COMPLETE SPECIFICATION

Document Perforator

I, LUDWIG SACHS, trading as METALL-WARENFABRIK HEINRICH SACHS INHABER DR. LUDWIG SACHS, of 37, Untere Weissgerberstrasse, Vienna, III, Austria, of Austrian Nationality, do hereby declare the invention, for which I pray that a patent may be granted to me, and the method by which it is to be performed, to be particularly described in and by the following statement:—

10 Document perforators are known that have four punches arranged in two pairs in the same plane. Documents may thus be provided with four holes, so that they can be inserted into files having different spacings between the holding posts. Moreover, it is also known to provide perforators with three punches, two of which are arranged near one another (say 1 cm. apart), means being provided for rendering one punch of the pair inoperative. This 15 form of perforator consequently provides for perforating with one of two different hole spacings, as desired.

The present invention concerns a paper perforator that also has four punches arranged in 20 one plane and in two pairs. The invention consists in that means are provided whereby at will either all four punches, the two outer punches of each pair, the two inner punches, or the outer punch of one pair and the inner 30 punch of the other pair may be rendered effective during operation of the perforator. This perforator thus enables documents to be perforated in a manner suitable for use with all ordinary files, e.g. with hole spacings of 35 6, 7 or 8 cm., and also enables them to be provided with four holes.

Further features of the invention will be apparent from the accompanying drawing which illustrates an example of construction of 40 perforator embodying the invention.

Figure 1 is an elevation view of the perforator;

Figure 2 is a section on the line II—II of Figure 1;

45 Figure 3 shows the control slide thereof in plan view; and

Figure 4 shows schematically the four positions relatively to the punches into which the slide may be adjusted.

[Price 2s. 8d.]

Referring to Figures 1 and 2; on a base 50 plate *a* there are secured two brackets *b* and *c* in each of which a pair of punches (*d*, *e*, *f* and *g*, see Fig. 4) is vertically guided. Each punch has a collar *h* against which a return spring *i* bears. An operating lever *j* spanning the two 55 brackets is pivotally connected thereto by a shaft *k*. Within the lever *j* there is arranged a longitudinally movable slide *m* that extends over all the punches. It is provided with apertures *n*, *o* and *p* (Fig. 3) and is of U- 60 shape in section so as to be sufficiently rigid and to also provide sufficient space for the head of the punch that at times extends through it. In this way the provision of holes in the upper surface of the lever for passage 65 of the punch heads is avoided, and these latter remain always covered.

The arrangement of the four punches in two pairs in the same plane is evident from Fig. 4, the spacing of the inner punches *e* and *f* being 70 6 cm. and that of the outer punches *d* and *g* being 8 cm. The four operating positions of the slide *m* are illustrated diagrammatically these being:—

POSITION I.

75 The slide covers all four punches, so that on downward movement of the lever all four punches are operated.

POSITION II.

The slide covers punches *d* and *g*, i.e. 8 cm. 80 perforation.

POSITION III.

The slide covers punches *e* and *f*, i.e. 7 cm. perforation.

POSITION IV.

85 The slide covers punches *e* and *f*, i.e. 6 cm. perforation.

These four positions can be marked on the slide, the marking being visible through an aperture in the lever *j*. Furthermore teeth *q* and *r* may be mounted on the perforator in the known manner, in order to indicate the 90 centre points of the hole spacing, the tooth *q* serving for the 7 cm. spacing and the tooth *r* for all the remainder.

What I claim is:—

1. A document perforator having four 95

Price 33p

- punches arranged in the same plane in two pairs, characterised in that means are provided whereby at will either all four punches, the two outer punches, the two inner punches, or
- 5 the outer punch of one pair and the inner punch of the other pair may be rendered effective during operation of the perforator.
2. A perforator according to Claim 1, characterised in that the operating lever is provided with a slide extending over all punches,
- 10 such slide having apertures that provide passages for those punches with which they

are in register and thus render such punches inoperative.

3. A perforator according to Claim 2, characterised in that the slide has a space enclosing cross-section, e.g. is of U-shape.

4. The perforator herein described with reference to the accompanying drawing.

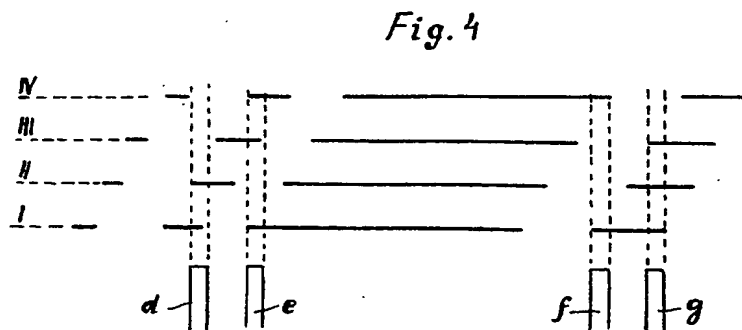
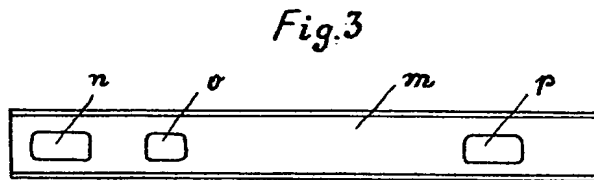
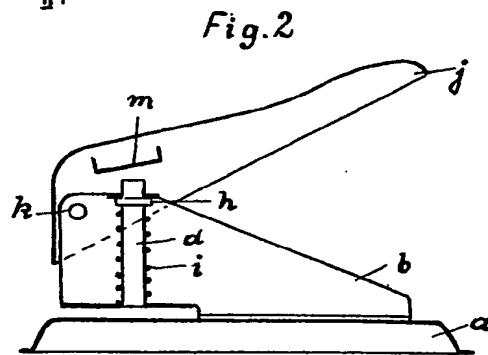
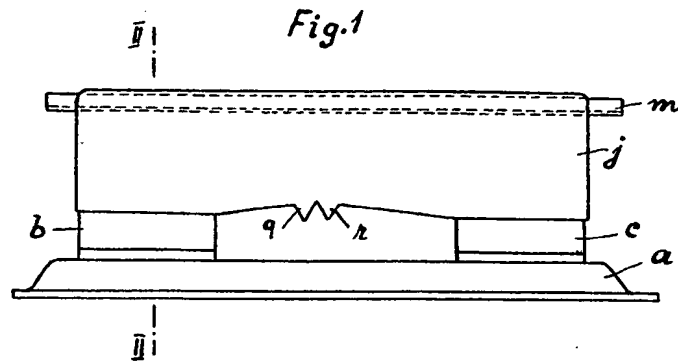
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Leamington Spa: Printed for Her Majesty's Stationery Office, by the Courier Press.—1954.
Published at The Patent Office, 25, Southampton Buildings, London, W.C.2, from which
copies may be obtained.

720,943 COMPLETE SPECIFICATION

1 SHEET

This drawing is a reproduction of the Original on a reduced scale.



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